

ABSTRACT OF THE DISCLOSURE

An automated chemical synthesizer including plural reaction vessels, a plurality of liquid containers, at least one liquid dispenser, a liquid amount storage, a dispensing amount calculator, and a liquid shortage detector. The plurality of liquid containers are configured to contain liquid chemicals respectively. The at least one liquid dispenser is configured to dispense the liquid chemicals from the plurality of liquid containers to the plural reaction vessels according to a synthesizing protocol. The liquid amount storage is configured to memorize a present amount of each of the liquid chemicals in the plurality of liquid containers. The dispensing amount calculator is configured to calculate a dispensing amount of each of the liquid chemicals to be dispensed according to the synthesizing protocol. The liquid shortage detector is configured to detect shortages of the liquid chemicals in the plurality of liquid containers by comparing the present amount memorized in the liquid amount storage and the dispensing amount calculated by the dispensing amount calculator.

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